

## **METHOD AND APPARATUS FOR PRODUCING COLLOIDAL NANOPARTICLES IN A DENSE MEDIUM PLASMA**

### **ABSTRACT OF THE DISCLOSURE**

A method and apparatus is utilized for producing colloidal dispersions of nanoparticles of electrically conducting materials. The colloidal dispersions are produced in a dense media plasma reactor comprising at least one static electrode and at least one rotating electrode. The plasma reaction sputters off minute particles of the electrically conducting material from which the electrodes are made. Methods of using the colloidal dispersions thus made are also described. Colloidal dispersions of silver produced in this manner are highly effective for bactericidal purposes.